

**Purpose:** To evaluate the possibility for uremic patients who are need to do abdominal surgery did not have hemodialysis during the perioperative duration. The group of patients just did the dialysis as usual with CAPD.

**Materials and methods:** During the duration between 2003 and 2014, we had finished 8 times of NUE or nephrectomies. Patient did go through the perioperative duration, just having CAPD, did not have HD. Did the volume decreased in each PD instillation, combined the frequency of dialysis increased to compensate the daily dialysis fluid volume.

**Results:** We succeeded to experience 8 times of bigger abdominal surgery for uremic patients who had CAPD regularly during the perioperative duration. They did not quit their PD to do HD.

**Conclusion:** To be continue to do CAPD and not to shift to do HD for uremia patients who had a nephrectomy or bigger abdominal surgery should be considered as a possible choice.

#### MP1-9.

#### INFLUENCE OF GENDER ON AUTHORITY OF OUTPATIENT DOCTOR-PATIENT COMMUNICATION—A PERSPECTIVE OF MULTICULTURISM

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**Purpose:** Information asymmetry and universalism have long been used to explain the problem of doctor-patient communication. The picture of short period of visit and too many professional terms applied are always shown at out-patient service. To improve quality of medical service is usually the way to improve patient satisfaction. However, this thinking process is doubt because good quality of medical service does not guarantee good patient satisfaction. In fact, doctor and patient communicates with each other involving “subject with multiple identities” The aim of the study is to investigate the effect of identity of gender on doctor-patient communication from multicultural perspective at out-patient service by model of multiculturalism and feminist pedagogy.

**Materials and methods:** The study design is derived from the Manicom's analytic frame and study model of multiculturalism and feminist pedagogy. The dimensions of the study include “experience and voice”, “physician's authority”, “care” and “responsibility” ethic. The patient satisfaction is used to measure the quality of doctor-patient communication. The influence of physician's gender on authority will be determined. The structured questionnaire is employed to collect data from patients visiting internal medicine, surgical, gynecological and urological out-patient. 407 patients enrolled in this study. Quantitative analysis is performed by using SPSS statistically and qualitative is by “in-depth interview”. Both quantitative and qualitative results are compared to understand the meaning of difference.

**Results:** Quantitative findings showed that male physicians' authority are greater than those of female. However, reversed findings is observed on qualitative interview data and female physicians' authority is greater.

**Conclusions:** Construction of gender mainstreaming hospital is established not only by physical facilities of out-patient service but also gender identity, especially from prespective of multiculturalism and feminist pedagogy. In addition, meaning of patriarchy is yet to be interpreted further in doctor-patient communication.

#### Renal transplantation

#### MP1-10.

#### APLASTIC ANEMIA CAUSED BY PARVOVIRUS B19 INFECTION IN A KIDNEY TRANSPLANT RECIPIENT WITH SYSTEMIC LUPUS ERYTHEMATOSUS-CASE REPORT

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Anemia is common after kidney transplantation. Parvovirus B19 (PVB19) infection is a rare etiology of post-renal transplant anemia, which can induce significant anemia including pure red cell aplasia but the incidence is probably under estimated. The most common viral infections in patients with systemic lupus erythematosus (SLE) is also PVB19 and it may be related to a lack of anti-B19 antibodies. We report a kidney transplant recipient with SLE who presented with severe anemia unresponsive to erythropoietin (EPO) therapy. Bone marrow examination showed hypocellularity, decreased erythroid series with excess pronormoblasts, which suggests aplastic crisis by PVB19 infection. Polymer chain reaction (PCR) testing for PVB19 revealed positive result. The patient received intravenous immunoglobulin (IVIG) 0.4g/kg body weight daily for 5 doses. One week after treatment, her Hgb returned to normal but declined again 2 weeks later with evidence of persistent PVB 19 viremia by PCR. Differential diagnosis of anemia in transplanted patients should include PVB 19 infection especially when resistant to EPO therapy and lack of appropriate reticulocyte response. And screening for PVB19 should be included in recipients with SLE.

#### Moderated Poster-2

#### LUTS

#### MP2-1.

#### REGULATION OF ZINC TRANSPORT GENE WITH PROSTATIC HYPERPLASIA IN TAIWAN

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**Purpose:** We investigate the relationship of Zinc transporter gene ZIP (*SLC39A1*) and ZnT (*SLC30A2*) polymorphism in Taiwanese patients with BPH.

**Materials and methods:** A total 45 BPH and 24 CVD patients and 48 healthy control subjects were enrolled. We analyzed the single nucleotide polymorphisms of *SLC39A1* and *SLC30A2* gene using the polymerase chain reaction (PCR)-based restriction analysis.

**Results:** There was significant differences for *SLC30A2* gene polymorphism (rs11247851) by Chi-Square test between in control and BPH group ( $p < 0.05$ , Chi-Square value was 6.338) and control and CVD group ( $p < 0.05$ , Chi-Square value was 6.887). The result displays that T residues have a protection for BPH and CVD diseases, *SLC30A2* gene polymorphism (rs11247851) was significant for regulate transport Zinc in BPH and CVD, but the protective effect was better in BPH than CVD disease.

**Conclusions:** *SLC30A2* gene polymorphism (rs11247851) was significant for regulating transport Zinc in BPH and CVD and T residues has a protection in BPH and CVD diseases but the protective effect was better in BPH than CVD disease. The cause maybe was relational concentrations of Zinc, prostate contain more Zn than cardiovascular tissue, and the transport zinc effect was larger by *SLC30A2* gene polymorphism (rs11247851) in BPH than CVD.

#### MP2-2.

#### PRIMARY BLADDER NECK OBSTRUCTION IN YOUNG MEN

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Primary bladder neck obstruction (PBNO) is a condition in which bladder neck opening is not adequate during voiding without another anatomical obstruction, such as benign prostatic obstruction in men or genitourinary prolapse in women. There are multiple theories of the etiology of PBNO, including increased striated sphincter activity, abnormal amount of non-muscular connective tissue, and abnormal arrangement of the detrusor/trigonal musculature. Its prevalence in male and female population is not

known. PBN0 is a videourodynamic (VUD) diagnosis. The classic presence of VUD study is high pressure and low flow voiding pattern without dysfunction of extrinsic sphincter relaxation and distal urethral obstruction.

Here we presented a 30-year-old male who has difficulty voiding. Uroflowmetry showed intermittent voiding pattern and low flow rate. Cystoscopy didn't reveal distal urethral stricture and benign prostatic hyperplasia. Videourodynamic study showed high pressure, low flow voiding pattern. After alpha block medical therapy failed, transurethral bladder neck incision over 5 and 7 o'clock bidirectional was performed. After surgery, his urinary flow rate increased. Uroflowmetry showed normal flow pattern with 37 c.c./sec. maximal flow rate. The recovery course was uneventful and he was satisfied with surgical result.

### MP2-3.

#### 5-ALPHA-REDUCTASE INHIBITORS AND RISK OF CARDIOVASCULAR DISEASES

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**Purpose:** The aim of this study is to investigate the risk of cardiovascular diseases after 5-alpha-reductase inhibitor (5ARI) therapy for benign prostatic hyperplasia (BPH) using the National Health Insurance Research Database (NHIRD) in Taiwan.

**Materials and methods:** In total, 1,486 adult patients newly diagnosed with BPH and who used 5-alpha-reductase inhibitors were recruited as the study cohort, along with 9,995 subjects who did not use 5-alpha-reductase inhibitors as a comparison cohort. Each patient was monitored for 5 years, and those who subsequently had cardiovascular diseases were identified. A Cox proportional hazards model was used to compare the risk of cardiovascular diseases between the study and comparison cohorts after adjusting for possible confounding risk factors.

**Results:** The patients who received 5ARI therapy had a lower cumulative rate of cardiovascular diseases than those who did not receive 5ARI therapy during the 5-year follow-up period (8.4% vs. 11.2%,  $P = 0.003$ ). In subgroup analysis, the 5-year cardiovascular event hazard ratio (HR) was lower among the patients older than 65 years with 91 to 365 cumulative defined daily dose (cDDD) 5ARI use (HR = 0.63, 95% confidence interval (CI) 0.42 to 0.92;  $P = 0.018$ ), however there was no difference among the patients with 28 to 90 and more than 365 cDDD 5ARI use (HR = 1.14, 95% CI 0.77 to 1.68;  $P = 0.518$  and HR = 0.83, 95% CI 0.57 to 1.20;  $P = 0.310$ , respectively).

**Conclusion:** The present study indicated that 5ARI therapy was safe and did not increase the risk of cardiovascular events in the BPH patients in 5 years of follow-up. Further mechanistic research is needed.

### MP2-4.

#### ASSOCIATION OF PROSTATE BLOOD FLOW WITH MALE LOWER URINARY TRACT SYMPTOMS

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**Purpose:** To investigate the association of prostate blood flow with lower urinary tract symptoms in aged male using Doppler spectral waveform (DSW) analysis.

**Materials and methods:** We performed a prospective analysis involving 133 aged male patients with clinically imaged benign prostatic hyperplasia. DSW parameters [peak-systolic velocity (PSV), end-diastolic velocity (EDV), and resistive index (RI)] were measured at bilateral neurovascular bundle (NVB) vessels and their urethral and capsular branches via Doppler transrectal ultrasound at the right lateral decubitus position. The association of these parameters with lower urinary tract symptoms scored with international prostate symptom score (IPSS) were analyzed.

**Result:** Overall, total IPSS scores were significantly associated with RI of each NVB vessels ( $r^2 = 0.03, 0.04$ ;  $p = 0.04, 0.02$ , respectively), as well as PSV of left PSV vessels. PSV of both NVB vessels is associated with the storage score ( $p = 0.022$  and  $0.016$ ), rather than with the voiding score. The

summation of frequency and urgency score is also associated with EDV of both capsular and urethral branches ( $p = 0.043$  and  $0.009$ , respectively), as well as PSV of NVB vessels at both sides ( $p = 0.045$  and  $0.019$ , respectively).

**Conclusion:** The association of prostate blood flow and lower urinary tract symptoms exists, mainly with storage symptoms. This finding may provide some information in searching the underlying the etiology.

### MP2-5.

#### UROTHELIAL DYSFUNCTION AND CHRONIC INFLAMMATION IN PATIENTS WITH BLADDER OUTLET OBSTRUCTION AND DIFFERENT BLADDER DYSFUNCTION AND DIFFERENT BOO DEGREE

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**Purpose:** Bladder outlet obstruction (BOO) may be induced by a wide range of functional and/or anatomic causes. The resulting obstruction frequently produces bothersome lower urinary tract symptoms (LUTS) in patients. The underlying mechanisms responsible for the bladder dysfunction in BOO remain poorly understood. The purpose of this study is to investigate the urothelial dysfunction and chronic inflammation in patients with BOO.

**Materials and methods:** In this prospective study, we enrolled those patients who presented with LUTS and underwent urodynamic study (VUDS) for further evaluation. Based on their VUDS performances, it was categorized into 4 sub-groups: control, BOO with detrusor overactivity (DO), BOO with Detrusor underactivity (DU) and BOO with hypersensitivity bladder (HSB). Bladder tissues taken from these patients were analyzed. Immunofluorescence (IF) staining of junction protein E-cadherin, mast cell, TUNEL and Zo-1 were performed. The fluorescence intensity of E-cadherin was measured using an Image J method. The percentage of activated mast cells and apoptotic cells were measured and quantified as positive cells per area unit ( $4 \mu m^2$ ). The numbers of positive protein were correlate with VUDS parameters.

**Results:** A total of 44 men were enrolled in this study. There were 34 patients presented with BOO (DO: 12, DU: 11 and HSB: 11). The expression and cellular location of E-cadherin, mast cell, TUNEL and Zo-1 were illustrated in Fig.1. The distribution of E-cadherin is significantly reduced in BOO with DU ( $8.37 \pm 9.50$ ) ( $p < 0.000$ ), whereas exhibit highest number of TUNEL ( $3.60 \pm 3.43$ ) ( $p < 0.021$ ). The tryptase signal in BOO with DO is significantly increased ( $19.05 \pm 6.14$ ) ( $p < 0.000$ ). All these parameters do not show positive correlation with Abrams–Griffiths (AG) number. Increasing number of E-cadherin is associated with Pdet and Qmax. Tryptase/ mast cell is positively associated with FSF.

**Conclusion:** In this study, we have shown that LUTS secondary to BOO are associated with chronic urothelial inflammation and urothelial dysfunction. DU induced by BOO is associated with significant urothelial defection. This may imply that the loss of functional protein and urothelial cell apoptosis might contribute to the pathophysiology of bladder dysfunction in BOO.

### MP2-6.

#### THE ROLE OF CHITOSAN IN TREATMENT INTERSTITIAL CYSTITIS

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**Purpose:** Since glycosaminoglycans plays an important role in the pathophysiology and treatment of interstitial cystitis, we hope to investigate the potential benefit of small molecular chitosan, which is the monomer of glycosaminoglycans, in the treatment of cyclophosphamide induced interstitial cystitis rat model.

**Materials and methods:** We used cyclophosphamide (CYP) intraperitoneal injection to induced chronic cystitis in female rats. Treatment with intravesical chitosan instillation was performed along with cystitis induction. Cystometrogram was performed to evaluate intravesical pressure and intercontraction interval.